

The Theory of Planned Behavior and E-cig Use: Sensation Seeking, E-cig Attitudes and E-cig Use

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E-cig use is growing in popularity in the United States, but the underlying risk factors for e-cig use are not well understood. Positive attitudes towards e-cigs play an important role in e-cig use and such attitudes are related to current e-cig use, intent to use, and actual future use of e-cigs. Using a Theory of Planned Behavior framework (Ajzen & Fishbein, 1988), the present study investigated how attitudes towards e-cig use and impulsive personality traits (negative urgency, positive urgency, lack of perseverance, lack of premeditation, sensation seeking) are related to the likelihood of e-cig use. Five hundred and forty-five participants (Mean age = 34.11, SD = 10.96, 48.6% female, 86.2% Caucasian) completed the Comparing E-Cigarettes and Cigarettes questionnaire (CEAC; attitude measure), the Short UPPS-P Impulsive Behavior Scale, and an e-cig use measure. E-cig users were significantly higher in negative urgency, $F(3,542)=3.88$, $p=.005$, and positive urgency, $F(3,542) = 2.80$, $p=.003$, traits that represent the tendency to act impulsively in extreme negative and positive emotional states, respectively. Those who use e-cigs also reported significantly higher scores on all the CEAC subscale scores (General Benefits, $F(3, 542) = 102.10$, $p<.001$, Addiction/Cessation, $F(3,542) = 67.20$, $p<.001$, and Improve Health, $F(3, 542) = 125.03$, $p<.001$). A structural path analysis revealed that sensation seeking is significantly related to positive e-cig attitudes ($b=0.63$, $p<.001$) and these attitudes were related to a higher likelihood of being an e-cig user ($b=0.63$, $p<.001$), after controlling for all other impulsivity traits and demographics. These findings provide initial support for a theoretical model of how impulsivity and attitudes toward e-cig use influence e-cig use and targeting these factors could be prime points of intervention for e-cig use.